

# Impact of IT in society (Nepal)

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## Abstract

*In the age of information technology man can do more by induction rather than their individual thinking. For the transformation of society there is vital role of technology. This paper is prepared based on the impact of information technology in the Nepalese scenario. Information from one part of the world can be viewed or spread out through out the world. In the context of Nepal, IT can be applied in the many field of society and advantage of IT can be taken by many people. At present application of IT in Nepal is in very primitive stage. Some example can be taken as IT can be applied or advantage of IT can be taken are young people employment, public awareness, disaster control and management. Only few percentages of Nepalese people are taking the advantage of electronic media like E-mail, Internet etc. Technologies compel people that they can do something for society. By using Internet, People from every field can understand that we can think up to that extent. This paper gives the brief description about how IT is used in different field, IT make what changes in the society, How IT increases young people employment, students how they are taking the advantage of internet and how can IT be used for the transformation of society based on the Nepalese scenario.*

**Keywords:** digital divide, cyber crime, youth empowerment, outsourcing, digital awareness, IT-ecology

## 1. Introduction

Nepal is a south Asian landlocked country between India and China with 141181 sq. Km. area. 85% of total population (24.4 millions) lives in rural areas. Topographically the country consist of 1/3<sup>rd</sup> hilly region which leaves country with low development rate. Nepal is popular in world scenario as a country of Mount Everest and Gautam Buddha and has its main occupation as Agriculture and Tourism industry. Literacy rate is below 50% and even being second largest country in water resources suffers from water supply problem in urban region and electricity problem in rural sector. Nepal is regarded as developing country in international scenario.

Nepal hives vast cultural society with ethics of their own kind. Popularly said 'char jaat chattis varna ko fulbari' meaning garden of 4 cast and 36 sub-cast. Nepalese are well known for their friendliness and hospitality yet being culturally conservative.

This paper explains the current scenario and discusses the trends towards growing era of cybernetics technology in its infancy in context of Nepal. The main motivation of this paper is to present the information about impact of IT in society and discuss the future roadmap to be taken directly in concern with youth to strengthen future of IT in Nepal. This paper also tries to find the answer how could IT be utilized as a tool for development.

IT is a vague field with many topics of interest but in this paper we mainly focus computer and internet as a medium of IT. Internet because it is well spoken well perceived tool of Information and Communication technology having day by day influence on the field.

## 2. Scenario

IT has made drastic revolution in the world in the recent years as it has made world as a single village. Nepal could not be separated from the global map of IT. At present IT lies at its infancy in our Society. Currently IT literacy rate of our country is only 9%. Here are some statistical data which shows the presence of Nepal in the global IT map.

Table 1. IT Statistics Nepal

<i><b>Fact</b></i>	<i><b>Figures</b></i>
Fixed telephone service providers	2
Mobile telephone service providers	2
Rural telephone service provider	1
Internet service provider (dial up)	23
Broadband service provider	3
Wi Fi service provider	1
Radio paging	8
Fax mail service provider	6
VSAT service provider	10
Total number of Dial-up Internet subscribers	40,000
Total number of Internet users	2,00,000
Total number of registered ISPs	26
Total number of VSAT subscriber	70
Total National Internet Bandwidth	23 mbps(Downlink)
Tele-centers	21
GMPCS (Sat. Phones) Service Providers	2
National Radio Broadcasting (AM) Service	1
National TV Broadcasting Service	3
Private TV Channels	5
Private Radio Broadcasting ( FM only)	56
Cable TV Service Providers	333

Although the main occupation of Nepalese is agriculture, but IT is not implemented in the promotion of agro product. It has just introduced in the fields such as e-governance, tourism, banking etc. we can summarize that there is lot to do.

It is always spoken about immense utilization of technology in western country and other developed countries, and then the question arises where we are now? This situation of discrepancy can be explained as digital divide, which exists between haves and have not. This digital divide could be bridged if we plan a road map beforehand taking in account the impact of IT in society of developing country like Nepal.

## 3. Impact

Speaking about Impact of IT, it could be both negative and positive, but we will mostly focus our concern on positive aspect as that will have direct relation on developing IT scenario of our Society. Lastly we will talk about negative aspect of IT. Here are the few fields where IT could be used as tools for development.

### 3.1. Digital governance

Digital governance basically implies Digitization of entire set of knowledge within a network which is open to all individuals (an inclusive network by design) opens up possibilities for all to

access and use this knowledge-- paving the way for Digital Governance or E-governance as it is more popularly known. IT influences Digital Governance in following possible ways:

**Technical:** The governmental process can be made more efficient by using IT. Generally automation of repetitive task can be processed easily and effectively for Example e-voting and e-billing.

**Supportive:** IT can be used as a supportive medium to improve existing governmental processes. For instance we can talk about teleconferencing, e-mail correspondence and finger print detection for maintaining security.

**Innovative:** New concepts can be implemented for governmental tasks as well as decentralization of processes. For instance, online checking of status of an application from beyond office hours; providing instant access to the same information to all individuals through emails and website.

### **3.2. Education**

The learning materials for the higher study are easily available in the Internet. Internet, in the country like Nepal technical books are not easily available and are not affordable, can be best used by the students.

Similarly old chronicles and manuscripts could be filmed, digitized, indexed and recorded in digital media or web portals so any scholar wishing to retrieve them could efficiently take advantage of technology without any physical damage to original document

Chances of getting scholarships in abroad via Internet are more likely, easy and faster. The concept of open-college and online study opens the door for local students in the global educational scenario.

### **3.3. Entertainment**

IT can be used for entertainment as following followings.

**Multimedia:** various movies, songs, wallpapers, ring tones etc can be downloaded and viewed via Internet.

**Interactive software:** interactive software like virtual tours, simulation and animation could provide both entertainment and learning.

**Games:** online gaming, quizzes, contests are rather newly introduced concepts and are gaining popularity despite slow Internet speed and less availability of gaming consoles.

### **3.4. Information and communication**

**News:** In the present context timely and updated news sources are not available for example live telecast, weather reporting etc. web news portals can be very handy for the flow of news.

**Tele-center:** Tele-centre is a physical place or work location where people can access to the world of information, technology and communication that helps people to get information about the world market and technology. Tele-centre are established with a view of providing Communication Technology to the people of urban and rural areas. Its main objective is to provide computer, Internet, and email technology facilities to the people of under-privileged society. Tele-center can be used for the control of different natural disaster if the occurrence of disaster is known in advance (early warning system) .

**Chat :** It is the cheaper means of virtual presence and facilitates two way communication despite of geographical separation. The most common methods are video conferencing, voice chat and most popularly in text messaging.

### **3.5. E-commerce**

Electronic commerce (e-commerce) is growing rapidly and fuelling investment, productivity increases and economic growth. However, the vast majority of that investment and return has taken place in developed nations, and the role and impact of e-commerce on developing nations is unclear. One must ask whether a developing nation can afford to allocate scarce human and economic resources to e-commerce based on the hypothesis that it will pay off.

Even gross Nepali income is only \$230 per capita (approx). E-commerce is growing at its own pace, possible due to Nepali residing abroad and e-banking introduced lately in the country. Currently e-commerce portals are only limited to gift exchange and electronic fund transfer but they have full potential to grow as web business portals.

The basic examples could be taken from e-banking service provided by Kumari bank and online shopping port of muncha.com. Bus and Air ticket reservation provided by different transportation and Airlines. Tours and hotel reservation service by various hotels.

### **3.6. Downbeat**

Even though overwhelming expectation lies under the impact of IT, it also harvest potential hazard to IT and Society itself. It depends upon user. Above explained are the pros of IT. Spending the time in gaming, chatting, searching pornographic sites can be taken as the cons of IT.

Above stated impact could affect only social aspect more danger lies on e-commerce, as potential frauds and crackers could make internet risky place for business and could result in heavy loss of financial resources.

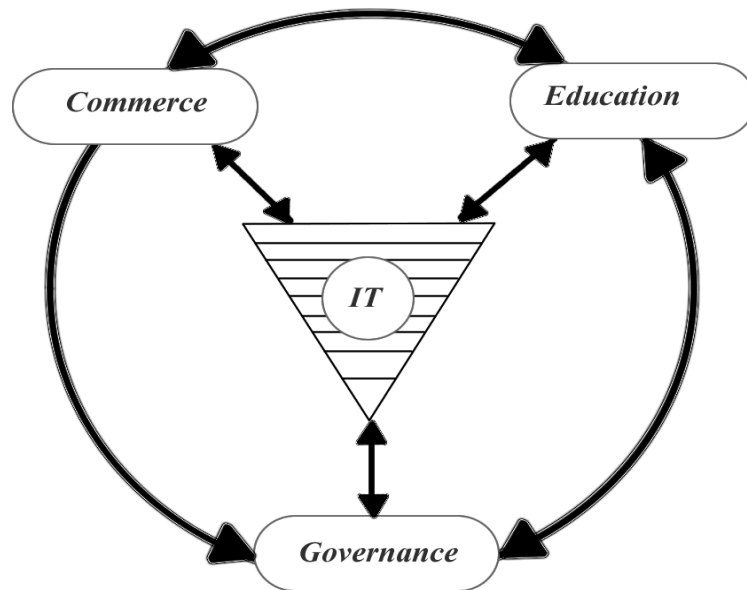
Another risk could be crisis of socialization in youth spending more time on Internet. They could end up developing distinct culture which could have negative impact on society. This may also lead to economic crisis as productive time of young generation will be lost in unproductive act due to potential of Internet being used as means of Entertainment and cyber crime.

## **4. Shaping the future**

Usually we become too ambitious while planning our future but we should well analysis our present condition, available resources and how those resources could be best utilized in order to gain maximum efficiency and throughput of the plan. The upcoming challenge is that how IT could be used for the nation development and transformation of society. Presently in Nepal IT is not used for the promotion of its local resources, making market for local product. What can be done in the future is that making use of IT locally as well as globally. Following points gives the brief idea about what can be done in the future.

- Benefits offered by information technologies to promote socio-economic development through e-commerce, e-education, telemedicine and technology transfer in rural areas as well as supporting in the area of agriculture development and environmental management should be exploited.
- Use of computers and Information Technology in the private sector to enhance competitiveness and efficiency.
- Appropriate management information systems for effective decision making in different sector should be encouraged.
- Open source software development, customization and adaptation to meet local needs of the community.
- Increment of the IT literacy rate for easy access of IT in the rural area as well as urban areas and realization the concept of 'Internet for all'.
- "IT for poverty reduction" – application in education, public health, gender equality, public awareness, governance, agriculture – applications are limitless!!!

- “IT for agricultural development” – since the basic products of Nepal are agricultural products so unless IT is implied for the promotion of agro products, nothing could be guaranteed
- Outsourcing: developing countries like Nepal can be made as a platform as low production cost can be maintained so outsourcing of IT related tasks such as software development, CAD, CAM is possible.
- Youth are back bone of nation, youth empowerment and human resource mobilization through different campaigns and awareness is necessary.
- Proper maintenance, monitoring and regulation of national IT policy so that IT could be used in productive way.
- Introduction of the concept of cyber police and cyber court for proper implementation of cyber law.
- Construction and balance of IT ecology.



**Fig 1. IT-ecology**

Less developed countries like Nepal must be part of the world of IT if they are to have any influence in socio-economic field at all. A technological infrastructure, based on fast and reliable telecommunications and usable computers, is vital for this. So certain portion of budget should be allocated always to promote IT and computerize many socio-economic aspects.

## 5. Conclusion

IT is the backbone for the development of nation. Hence, IT has no boundaries, more we share, more we get. Now it is the time for developing country like Nepal to realize the importance of sharing information using new technology and methodology.

Although IT has both as well as negative impact but depends upon the way of utilization. This paper highlights the brighter side of IT and if the downbeats of IT could be minimized by the formulation of better plan and policy, the goal of nation development and transformation of society could be better optimized.

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